Appl. No. 10/562,742
Reply to Office Action mailed January 6, 2009

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1 to 12 (canceled)

Claim 13. (currently amended) [[The]] A method as claimed in claim [[11,]] wherein the for treating chronic pain comprising administering to a patient an effective amount of a k-opioid receptor agonist which is a compound represented by the following general formula or a pharmaceutically acceptable salt thereof:

$$\begin{array}{c|c}
R^2 \\
\hline
S \\
N \\
R^1
\end{array}$$

$$\begin{array}{c|c}
R^4 \\
\hline
N \\
R^5
\end{array}$$

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wherein R¹ represents an acyl group;

 ${\rm R}^2$ and ${\rm R}^3$, which are the same or different, represent a hydrogen atom, a halogen atom, an alkyl group, a cycloalkyl group, an aryl group, a hydroxyl group or its ester, an alkoxy group, an aryloxy group, a carboxy group or its ester, an alkylcarbonyl group, an arylcarbonyl group, an amino group, an alkylamino group, an arylamino group, a cyano group or a nitro group, the alkyl group, the cycloalkyl group, the aryl group, the alkoxy group, the aryloxy group, the alkylcarbonyl group, the arylcarbonyl group, the alkylamino group or the arylamino group can be substituted with a halogen atom, an alkyl group, a cycloalkyl group, an aryl group, a hydroxyl group or its ester, an alkoxy group, an aryloxy group, a carboxy group or its ester, an alkylcarbonyl group, an arylcarbonyl group, an amino group, an alkylamino group, an arylamino group, a cyano group or a nitro group; R4 and R5, which are the same or different, represent a hydrogen atom, an alkyl group, a cycloalkyl group, an aryl group, a hydroxyl group or its ester, an alkoxy group, an aryloxy group or an acyl group, the alkyl group, the cycloalkyl group, the aryl group, the alkoxy group, the aryloxy group or the acyl group can be substituted with a halogen atom, an alkyl group, a cycloalkyl

group, an aryl group, a hydroxyl group or its ester, an alkoxy group, an aryloxy group, a carboxy group or its ester, an alkylcarbonyl group, an arylcarbonyl group, an amino group, an alkylamino group, an arylamino group, a mercapto group, an alkylthio group, an arylthio group, a cyano group, a nitro group or a heterocycle, and further the alkyl group, the cycloalkyl group, the aryl group, the alkoxy group, the aryloxy group, the alkylcarbonyl group, the arylcarbonyl group, the alkylamino group, the arylamino group, the alkylthio group, the arylthio group or the heterocycle can be substituted with an aryl group, a hydroxyl group or its ester, an alkoxy group, an aryloxy group, an alkoxyalkoxy group, a carboxy group or its ester; R^4 and R^5 can be bound to form a heterocycle, the heterocycle can be substituted with a halogen atom, an alkyl group, a cycloalkyl group, an aryl group, a hydroxyl group or its ester, an alkoxy group, an aryloxy group, a carboxy group or its ester, and further the alkyl group, the cycloalkyl group, the aryl group, the alkoxy group or the aryloxy group can be substituted with an aryl group, a hydroxyl group or its ester, an alkoxy group, an aryloxy group, an alkoxyalkoxy group, a carboxy group or its ester; and A₁ represents an alkylene group.

Claim 14. (canceled)

Claim 15. (currently amended) The method as claimed in claim 13, wherein the κ -opioid receptor agonist is selected from the group consisting of (+)-3-acetyl-6-chloro-2-[2-(3-(N-(2-hydroxyethyl)-Nisopropylamino)propoxy)-5-methoxyphenyl]benzothiazoline, (+)-3-acetyl-6-chloro-2-[2-(3-(N-(2-methoxyethyl)-Nisopropylamino) propoxy) -5-methoxyphenyl] benzothiazoline, (+)-3-acetyl-6-chloro-2-[2-(3-(N-(2-ethoxyethyl)-Nisopropylamino)propoxy)-5-methoxyphenyl]benzothiazoline, (+) -3-acetyl-6-chloro-2-[2-(3-chloropropoxy)-5methoxyphenyl]benzothiazoline, 3-acetyl-6-chloro-2-[2-(3-(N-(2-hydroxyethyl)-N-isopropylamino)-1methylpropoxy) -5-methoxyphenyl]benzothiazoline, (+) -2-[2-(3-(N-(2-acetoxyethyl)-N-isopropylamino)propoxy)-5methoxyphenyl]-3-acetyl-6-chlorobenzothiazoline, (+)-3-acetyl-6-chloro-2-[2-(3-(N-isopropyl-(Nmethoxymethyloxyethyl)amino)propoxy)-5-methoxyphenyl] benzothiazoline [[,]] and 3-acetyl-6-chloro-2-[2-(3-(N-(2-ethoxyethyl)-N-

isopropylamino)propoxy)-5-methoxyphenyl]
benzothiazolinediacetyl benzothiazoline,
or a pharmaceutically acceptable salt thereof.

Claim 16. (canceled)

Claim 17. (withdrawn-currently amended) The method as claimed in claim [[11]] $\underline{13}$, wherein the κ -opioid receptor agonist is an arylacetic acid (N-alkyl-N-(N',N'-dialkyl)aminoalkyl)amide derivative.

Claim 18. (canceled)

Claim 19. (withdrawn) The method as claimed in claim 17, wherein the arylacetic acid (N-alkyl-N-(N',N'-dialkyl)aminoalkyl)amide derivative is trans-2-(3,4-dichlorophenyl)-N-methyl-N-[2-(1-

pyrrolidinyl)cyclohexyl]acetamide or a pharmaceutically acceptable salt thereof.

Claim 20. (canceled)

Claim 21. (withdrawn) The method as claimed in claim 17, wherein the arylacetic acid (N-alkyl-N-(N',N'-dialkyl)aminoalkyl)amide derivative is

2,2-diphenyl-N-[2-(3-(S)-hydroxy-1-pyrrolidinyl)-1-(S)-phenylethyl]methylacetamide or a pharmaceutically acceptable salt thereof.

Claim 22. (canceled)

Claim 23. (withdrawn) The method as claimed in claim 17, wherein the arylacetic acid (N-alkyl-N-(N',N'-dialkyl)aminoalkyl)amide derivative is

2-(3,4-dichlorophenyl)-N-methyl-N-[(5R*,7S*,8S*)-7-(1-pyrrolidinyl)-1-oxaspiro[4,5]deca-8-yl]acetamide or a pharmaceutically acceptable salt thereof.

Claim 24. (canceled)

- Claim 25. (currently amended) The method as claimed in claim [[11]] $\underline{13}$, wherein the κ -opioid receptor agonist is continuously administer
- Claim 26. (new) The method as claimed in claim 13, wherein the κ -opioid receptor agonist is (+)-3-acetyl-6-chloro-2-[2-(3-(N-(2-hydroxyethyl)-N-isopropylamino)propoxy)-5-methoxyphenyl]benzothiazoline. Claim 27. (new) The method as claimed in claim 13, wherein the κ -opioid receptor agonist is (+)-3-acetyl-6-chloro-2-[2-(3-(N-(2-methoxyethyl)-N-isopropylamino)propoxy)-5-methoxyphenyl]benzothiazoline.
- Claim 28. (new) The method as claimed in claim 13, wherein the κ -opioid receptor agonist is (+)-3-acetyl-6-chloro-2-[2-(3-(N-(2-ethoxyethyl)-N-isopropylamino)propoxy)-5-methoxyphenyl]benzothiazoline.
- Claim 29. (new) The method as claimed in claim 13, wherein the κ -opioid receptor agonist is 3-acetyl-6-chloro-2-[2-(3-(N-(2-ethoxyethyl)-N-isopropylamino) propoxy)-5-methoxyphenyl]benzothiazoline.